Work Order ID 73165

Friday, August 26, 2011 7:14:18 AM

Item ID: D3639-4 **Accept** **Setup Start** **Stop**

Revision ID:

Item Name: Doubler

Start Date: 8/26/2011 **Start Qty:** 6.00 **Cust Item ID:**

Required Date: 9/9/2011 **Req'd Qty:** 6.00 **Customer:**

Reference:

Approvals: **Process Plan:** MF **Date:** 11-0829 **Tooling:** ______ **Date:** ______ **Run Start**

QC: ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______ **Stop**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp

Draw Nbr	Revision Nbr
D3639	Rev A

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
100 Waterjet FLOW CNC Waterjet 2024.050	FLOW WATER JET **Memo** 1-Cut as per Dwg D3639 Dwg Rev: A Prog Rev: A 2-Deburr if necessary	0.00 0.00	B11-8-31		(6)	
110 QC Quality Control	QC2- Inspect parts off machine FAI/FAIB **Memo**	0.00 0.00	AB11-8-31			
120 QC Quality Control	QC8- Inspect parts - second check **Memo**	0.00 Su109101 0.00	(+6)			

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________ **PAR #:** ______ **Fault Category:** ____________ **NCR:** Yes No **DQA:** ______ **Date:** ______

Resolution: ____________ **Disposition:** ____________ **QA: N/C Closed:** ______ **Date:** ______

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

Work Order ID 73165

Friday, August 26, 2011 7:14:18 AM

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Revision ID:

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Start Date: 8/26/2011 **Start Qty:** 6.00 **Cust Item ID:**

Required Date: 9/9/2011 **Req'd Qty:** 6.00 **Customer:**

Reference:

Approvals: **Process Plan:** ______ **Date:** ______ **Tooling:** ______ **Date:** ______ **Run** **Start** **Stop**

QC: ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	NC BRAKE	0.00				6			
Brake NC Brake NC	**Memo** Form as per Dwg D3639	0.00 SB 11/09/01							
140	QC5- Inspect part completeness to step on W/O	0.00				x6 -4			
QC Quality Control	**Memo**	0.00 S 11/09/01							
150	Chemical Conversion Coat per QSI005 4.1	0.00				6XØ M-4 11/09/06			
HandFinish Hand Finishing	**Memo**	0.00							

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________ **PAR #:** ______ **Fault Category:** ____________ **NCR:** Yes No **DQA:** _____ **Date:** ________

Resolution: ____________ **Disposition:** ____________ **QA: N/C Closed:** ________ **Date:** ________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 73165

Friday, August 26, 2011 7:14:18 AM

Item ID: D3639-4 **Accept**

Setup Start / Stop

Revision ID:

Item Name: Doubler

Start Date: 8/26/2011 **Start Qty:** 6.00

Required Date: 9/9/2011 **Req'd Qty:** 6.00

Cust Item ID:

Customer:

Reference:

Run Start / Stop

Approvals: **Process Plan:** ______ **Date:** ______ **Tooling:** ______ **Date:** ______

QC: ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 QC Quality Control	QC3- Inspect Part Finish **Memo**	0.00 0.00				6	ϕ		11/08/06
170 Packaging Packaging	Identify as per dwg & Stock Location ST 244 **Memo**	0.00 0.00			(6x)	11-09-06			
180 QC Quality Control	QC21- Final Inspection - Work Order Release **Memo**	0.00 0.00						11/9/6	

MF 11-09-06

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W/O:	WORK ORDER CHANGES						
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: ____________ **PAR #:** ______ **Fault Category:** ____________ **NCR:** Yes No **DQA:** _____ **Date:** ________

Resolution: ____________ **Disposition:** ____________ **QA: N/C Closed:** ________ **Date:** ________

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
			Corrective Action Section B					
DATE	**STEP**	**Description of NC** Section A	**Initial** Chief Eng	**Action Description** Chief Eng	**Sign & Date**	**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector

NOTE: Date & initial all entries

Picklist Print

Friday, August 26, 2011 7:14:15 AM

Work Order ID: 73165

Parent Item: D3639-4

Parent Item Name: Doubler

Start Date: 8/26/2011 **Required Date:** 9/9/2011

Start Qty: 6.00 **Required Qty:** 6.00

Comments: IPP Rev:A New Issue 07-07-20 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.050 2024-T3 .050 sheet		Purchased	No			100	sf	95.9000	0.4277	2.701263 181-8-31			

Location		Loc Qty	Loc Code
MAT22		95.9	
	117684	95.9	

117684

(6)

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W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

Resolution: ____________________ **Disposition:** ____________________ **QA: N/C Closed:** __________ **Date:** _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
			Corrective Action Section B					
DATE	**STEP**	**Description of NC** Section A	**Initial** Chief Eng	**Action Description** Chief Eng	**Sign & Date**	**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	73165
Description: Doubler	**Part Number:**	**D3639-4**
Inspection Dwg: D3639 **Rev:** A		**Page 1 of 1**

FIRST ARTICLE INSPECTION CHECKLIST

[X] **First Article** [ ] **Prototype**

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.625	+0.008/-0.001	.628	✓		V HB02	
Ø0.191	+0.005/-0.001	.193	✓		V	
Ø0.098	+0.004/-0.001	.100	✓		V	
0.45	+/-0.030	.452	✓		V	
1.350	+/-0.010	1.351	✓		V	
2.25	+/-0.030	2.249	✓		V	
3.15	+/-0.030	3.147	✓		V	
4.05	+/-0.030	4.048	✓		V	
4.95	+/-0.030	4.951	✓		V	
5.85	+/-0.030	5.847	✓		V	
6.75	+/-0.030	6.749	✓		V	
7.65	+/-0.030	7.647	✓		V	
8.55	+/-0.030	8.554	✓		PROW302	
9.350	+/-0.010	9.355	✓		P	
9.45	+/-0.030	9.456	✓		P	
10.350	+/-0.010	10.348	✓		P	
11.25	+/-0.030	11.254	✓		P	
12.15	+/-0.030	12.15	✓		P HB01	
12.85	+/-0.030	BEND			T	
13.86	+/-0.030	13.86			T	
13.96	+/-0.030	13.96			T	
0.805	+/-0.010	.802	✓		V	
1.00	+/-0.030	1.002	✓		V	
2.100	+/-0.010	2.101	✓		V	
3.30	+/-0.030	3.302	✓		V	
2.000	+/-0.010	2.001	✓		V	
2.590	+/-0.010	2.588	✓		V	

Measured by:	RB	Audited by:	[signature]	Prototype Approval:	N/A
Date:	11-8-31	Date:	11/09/01	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.10.24	New Issue	KJ/EC/DD [signature]	[signature]

Dart Aerospace Ltd

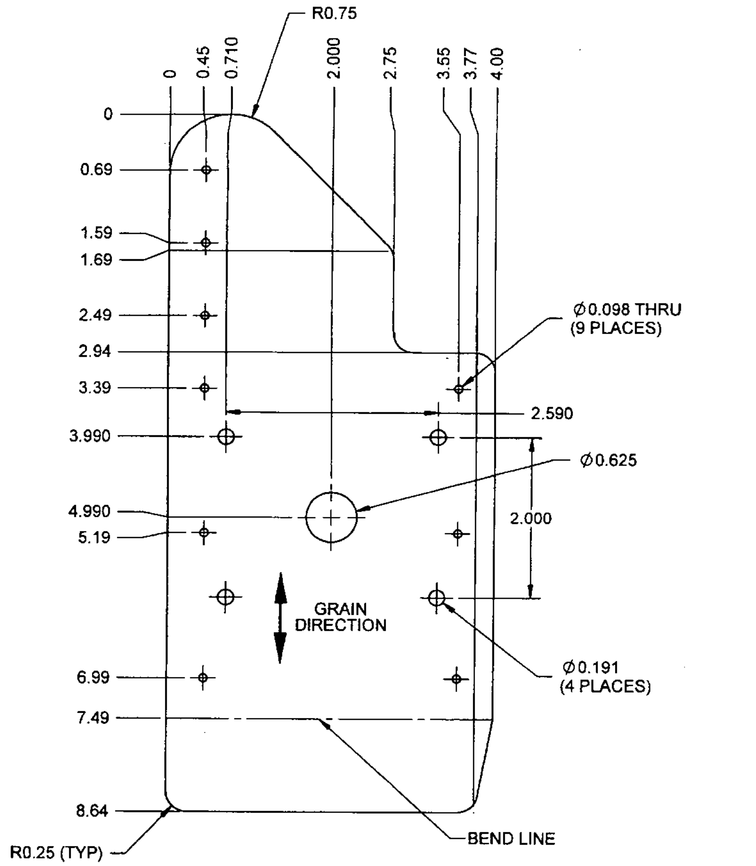
W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________ **PAR #:** ______ **Fault Category:** ____________ **NCR:** Yes No **DQA:** _____ **Date:** ________

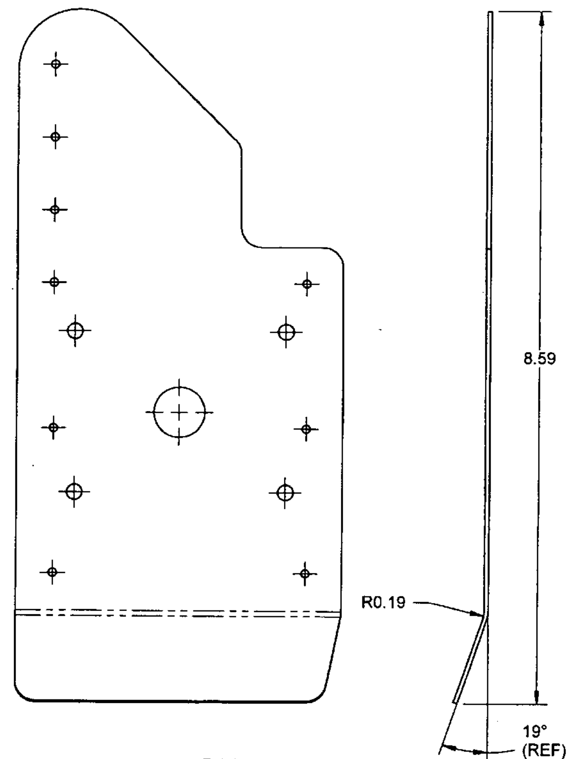
Resolution: ____________ **Disposition:** ____________ **QA: N/C Closed:** ________ **Date:** ________

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

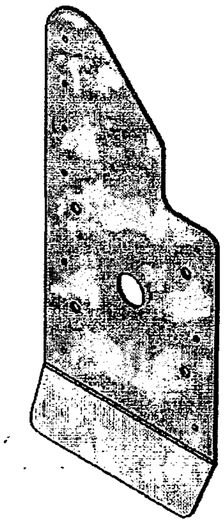
NOTE: Date & initial all entries



D3639-1F FLAT PATTERN
(D3639-2F OPPOSITE)



D3639-1 DOUBLER
(WAS GENEVA P/N G10604-3)
D3639-2 OPPOSITE
(WAS GENEVA P/N G10604-6)



#73165

RELEASED 07.09.07

NOTES:
1) MATERIAL: 2024-T3 ALUMINUM SHEET 0.050 THICK PER QQ-A-250/4 OR AMS 4037
(REF DART SPEC M2024T3S.050)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3639-1/-2" USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: 0.14 lbs

REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE; REPLACES G10604	LE	07.07.27

DESIGN	TS	DART AEROSPACE USA, INC. PORT HADLOCK, WA
DRAWN	LE	
CHECKED		DRAWING NO. D3639 — REV. A — SHEET 1 OF 2
MFG. APPR.		
APPROVED		TITLE DOUBLER — SCALE 2:3
DE APPR.		
DATE	07.07.27	

Dart Aerospace Ltd

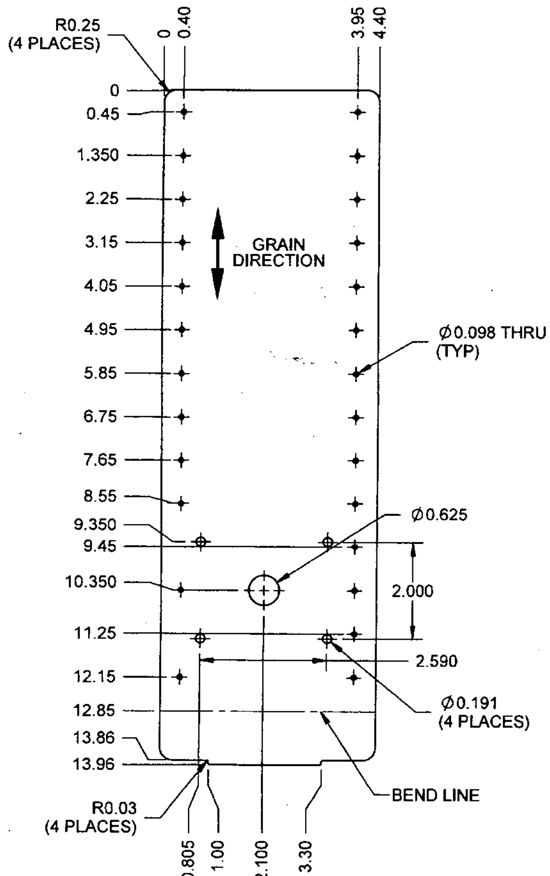
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

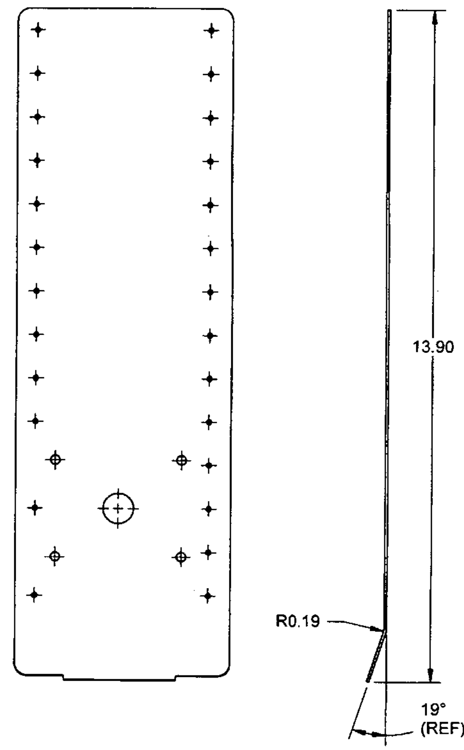
Resolution: ____________________ **Disposition:** ____________________ **QA: N/C Closed:** __________ **Date:** _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3639-3F FLAT PATTERN
(D3639-4F OPPOSITE)



D3639-3 DOUBLER
(WAS GENEVA P/N G10604-4)
D3639-4 OPPOSITE
(WAS GENEVA P/N G10604-5)



73165

RELEASED 07.09.07

NOTES:
1) MATERIAL: 2024-T3 ALUMINUM SHEET 0.050 THICK PER QQ-A-250/4 OR AMS 4037
(REF DART SPEC M2024T3S.050)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3639-3/-4" USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: 0.3 lbs

DESIGN	TS	**DART AEROSPACE USA, INC.** PORT HADLOCK, WA
DRAWN	LE	
CHECKED	[illegible]	DRAWING NO. D3639 — REV. A — SHEET 2 OF 2
MFG. APPR.	[illegible]	
APPROVED	[illegible]	TITLE DOUBLER — SCALE 2:5
DE APPR.	[illegible]	
DATE	07.07.27	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

Resolution: ____________________ **Disposition:** ____________________ **QA: N/C Closed:** __________ **Date:** _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
			Corrective Action Section B					
DATE	STEP	Description of NC Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector

NOTE: Date & initial all entries